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10/702,438

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Raquel De Carvalho

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EXAMINER

GOLLAMUDI, SHARMILA S

ART UNIT

PAPER NUMBER

1616

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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3 MONTHS

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/702,438

Applicant(s)

DE CARVALHO ET AL.

Examiner

Sharmila S. Gollamudi

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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### DETAILED ACTION

Receipt of Amendments/Remarks and the Information Disclosure Statements filed 5/22/06 is acknowledged. Claims 1-2, 4-25 are pending in this application. Claim 3 stands cancelled.

#### *Information Disclosure Statement*

The information disclosure statement (IDS) submitted on 5/22/06 has been considered by the examiner.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

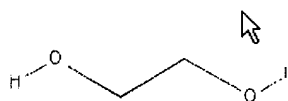
**The rejection of claims 1-2, 4-10 and 12-25 under 35 U.S.C. 102(e) as being anticipated by Bolich et al (6,635,240) is maintained.**

Bolich discloses an aerosol hair styling compositions which comprise (a) from about 5% to about 90% of a water-soluble polyalkylene glycol (polyol) that has a number average molecular weight of from about 190 to about 1500 and from about 5 to about 35 repeating alkylene oxide radicals wherein each of the repeating alkylene oxide radicals has from 2 to 6 carbon atoms; (b) from about 1% to about 90% of a liquid carrier; and (c) from about 5% to about 40% of a propellant. See column 3, lines 20-30. The aerosol hair styling compositions provides improved dry hair restyling performance for several days without the need to reapply

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the composition or add any other styling aid on the hair. See column 3, line 65 to column 4, line 16. The composition is packaged into an aerosol dispenser. See column 16, lines 13-26.

Bolich discloses the concentration of the polyalkylene glycols are generally in a range from about 1% to about 90%, preferably from about 3% to about 75%, more preferably from about 7.5% to about 50%, even more preferably from about 10% to about 25%, by weight of the composition. Specific examples of the preferred polyalkylene glycols include polyethylene/polypropylene glycol copolymers, triglycerin, hexaglycerin, PEG-4, PEG-6, PEG-5, PEG-6, PEG-8, PEG-12, PEG-14, PEG-18, PEG-20, PEG-32, and mixtures thereof. Specific examples of the most preferred polyalkylene glycols include, but are not limited to, PEG-4; PEG-8 (PEG-8 is also known as Carbowax 400); and PEG-12 (PEG-12 is also known as Carbowax 600, which is available from Union Carbide). See column 6, lines 20-45 and examples. PEG is abbreviated for polyethylene glycols. Note the examples utilize Carbowax 300 and 400, which have a molecular weight less than 500 and instant carbon atoms. It is the examiner's position that PEGs read on claim 12 since the two carbon atoms (C-C) are considered a hydrocarbon chain (the specification does not give a definition of the length of the hydrocarbon chain) and since the two carbons are continuous this reads on "not interrupted by a heteroatom".



For instance, Carbowax 300 has a formula of

where the two carbons that are continuous and thus reads on claim 12.

Bolich discloses additional styling agents to help improve initial hair hold performance in an amount of about 0.25% to about 5%, preferably from about 0.5% to about 4.0%, by weight of

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the compositions. See column 6, lines 45-55. Bolich teaches the use of polysaccharide styling polymers selected from anionic polysaccharides, cationic polysaccharides, and nonionic polysaccharides. See column 7, lines 1-5 and example XIX-XX.

Bolich also discloses the hair styling compositions further comprises a gelling agent to help provide the desired viscosity and it also helps to provide for improved hair hold in an amount from about 0.1% to about 10%, preferably from about 0.2% to about 5.0%, by weight of the compositions. Bolich teaches the preferred crosslinked carboxylic acid polymers are those crosslinked carboxylic acid homopolymers or copolymers, which contain unneutralized acid monomers (anionic polymer). Bolich teaches the preference for crosslinked carboxylic acid polymers which have unneutralized acid monomers is due to the fact that they are effective in providing gelling properties to the residue without suppressing the ease of removability of the residue by shampooing the hair. See column 12, line 64 to column 13, line 5 and examples XV-XVI, which utilize Carbopol 934, which is an anionic polymer.

Bolich discloses the liquid carrier can comprise one or more liquid carriers provided that the selected styling agent is sufficiently miscible or dispersible in the selected liquid carrier. Preferred C1 -C6 alkanols include monohydric alcohols such as ethanol, isopropanol, and mixtures thereof. When the hair styling compositions comprise combinations of water and an organic solvent such as C1-C6 alkanols, water is preferably included at concentrations of from about 40% to about 90%, more preferably from about 50% to about 90%, even more preferably from about 60% to about 90%; and the alkanols are preferably included at total concentrations of from about 1% to about 15%, more preferably from about 3% to about 15%, even more

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preferably from about 5% to about 10%, by weight of the composition. See column 8, lines 15-60 and examples.

Bolich discloses the total concentration of the propellant in the aerosol hair styling composition include one or more propellants and the total propellant concentration ranging from about 5% to about 40%, preferably from about 5% to about 25%, more preferably from about 5% to about 15%, by weight of the composition. Suitable propellants taught include hydrocarbons, nitrogen, carbon dioxide, nitrous oxide, atmospheric gas, 1,2-difluoroethane, dimethylether, and mixtures thereof. Suitable hydrocarbon propellants include propane, butane, and isobutane. See column 11, lines 15-25 and examples.

Bolich discloses optional materials including preservatives, surfactants, conditioning polymers, electrolytes, fatty alcohols, hair dyes, antidandruff actives, odor masking agents, pH adjusting agents, perfume oils, perfume solubilizing agents, sequestering agents, emollients, lubricants and penetrants such as various lanolin compounds, protein hydrolysates and other protein derivatives, sunscreens, volatile silicone fluids, and isoparaffins. See column 15, lines 50-65 and examples.

### ***Response to Arguments***

Applicant argues that a claim is only anticipated when each and every element is set forth in a single prior art reference. Applicant argues that the invention must be described and arranged as set forth by the claims. Applicant argues that Bolich does not identically describe the presently claimed composition. It is argued that the examiner has selectively chosen aspects of Bolich and arranged in a fashion to read on the claims and this is not the proper route for anticipation. Applicant argues that Bolich does not require the use of an anionic polymer in

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combination with at least one polyol, a medium, and at least one propellant gas. Applicant argues that Bolich merely states that the composition may contain anionic, cationic, and glucosamine polysaccharides. However, this is an optional component which is not grounds for a 102. Applicant argues that although the examples utilize Ucare JR-400, it is erroneously called an anionic polysaccharide.

Applicant's arguments filed 5/22/06 have been fully considered but they are not persuasive. The instant claims are directed to an aerosol device containing a composition comprising a) at least one anionic fixing polymer present in an amount ranging from 0.5% to 10% by weight, based on the total weight of the aerosol composition, b) at least one polyol with a molecular weight less than 500, present in an amount greater than 15% by weight, based on the total weight of the aerosol composition, c) an aqueous-alcoholic or aqueous medium comprising at least 10% by weight of water, based on the total weight of the aerosol composition, and d) at least one propellant gas in an amount greater than or equal to 30% by weight, based on the total weight of the aerosol composition.

Firstly, it is noted that Ucare is a cationic polysaccharide. Nonetheless it is the examiner's position that Bolich still anticipates the instant invention for the following reasons:

The examiner points out that every embodiment need not be exemplified in order to anticipate a claim; this is not the criteria for anticipation. The criteria for anticipation is that if one can immediately envisage the embodiment, then it is anticipated. In instant case, the examiner points out that although it is an optional embodiment, Bolich clearly discloses:

In addition to the styling agent, the hereinbefore described hair styling compositions of the present invention may further comprise one or more optional styling polymers which can help provide improved initial hair hold performance. The total concentration of such optional styling polymers ranges from about 0.25% to about 5%, preferably from about 0.5% to about 4.0%, by weight of the compositions. Column 5, lines 45-54.

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Optional styling polymers for use in combination with the styling agent defined herein include any known or otherwise effective styling polymer, provided that the optional styling polymer is soluble in the liquid carrier described herein which contains the optional styling polymer and styling agent, and provided that under test conditions of 27.degree. C. and 15% relative humidity the optional styling polymer is insoluble in the residue described herein and can form a solid film that is surrounded by the styling agent material after evaporation of the liquid carrier and any other volatile materials contained in the aerosol hair styling compositions of the present invention. Such optional styling polymers include, but are not limited to, polysaccharide styling polymers. Specific nonlimiting examples of suitable polysaccharide styling polymers include anionic polysaccharides, cationic polysaccharides, and glucosamine polysaccharide derivatives. The glucosamine polysaccharide derivatives are the preferred optional styling polymers. Column 6, lines 55-67 to column 7, lines 1-4.

Bolich clearly discloses the combination of an additional polymer and the inventive styling agent. Not only does Bolich disclose the combination, Bolich provides the specific concentration that is used. Further, the examples utilize the additional styling polymers, specifically polysaccharides. Thus, this optional embodiment is exemplified in examples XIX and XX. Examples XIX and XX discloses a composition comprising at least one polyol as defined by the claims; an aqueous medium, a propellant gas. Although the examples do not exemplify an anionic polysaccharide, Bolich discloses the polysaccharides may be 1) an anionic polysaccharides, 2) cationic polysaccharides, or 3) glucosamine polysaccharides. The examiner points out that the species are sufficiently limited for one to immediately envisage the use of each polysaccharide respectively. Lastly, the examiner points out that claim 12 of US '240 is directed to the composition further comprising an anionic polysaccharides, cationic polysaccharides, or glucosamine polysaccharides. Claim 12 depends on independent claim 1 which is directed to an aerosol hair styling composition comprising: (a) from about 5% to about 90% by weight of a water-soluble polyalkylene glycol that is substantially free of polyalkylene glyceryl ethers and that has a number average molecular weight of from about 190 to about 1500 and from about 12 to about 35 repeating alkylene oxide radicals wherein each of the repeating alkylene oxide radicals has from 2 to 6 carbon atoms; (b) from about 1% to about 90% by weight



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of a liquid carrier; and (c) from about 5% to about 40% by weight of a propellant. Thus, it is the examiner's position that Bolich anticipates claim 1.

Assuming arguendo that one cannot immediately envisage the use of an anionic polysaccharide, the examiner points to Bolich's disclosure that optional gelling agents may be used.

The preferred optional gelling agent also helps to provide for improved hair hold performance. Suitable optional gelling agents include any material known or otherwise effective in providing any gelling or measurable viscosity increase to the residue. The concentrations of the optional gelling agent in the compositions range from about 0.1% to about 10%, preferably from about 0.2% to about 5.0%, by weight of the compositions. Column 6, 45-54.

These gelling agents are chosen from carboxylic acid polymers and nonionic cellulose polymers.

Applicant argues that although Bolich teaches the gelling agents, these are optional and again one must select the gelling agent and then select an anionic polymer as the gelling agent. The examiner points to examples XV and XVI, which comprises Carbopol 934, which is a crosslinked homopolymer of acrylic acid. Note this reads on dependent claim 2. The composition further contains the instant polyol, a propellant gas, and an aqueous medium. Thus, the examples anticipate the instant invention and the composition "as arranged by the instant invention" is disclosed by Bolich. It is noted that the examiner pointed out that example XV and XVI taught Carbopol 934, however applicant has not addressed this.

**The rejection of claims 1-2 and 4-25 under 35 U.S.C. 102(b) as being anticipated by Birkel et al (2001/0003584) is maintained.**

Birkel discloses a hair composition comprising (a) a terpolymer present in the composition in an amount of 0.01 to 20% and (b) a anionic polymer present in an amount of

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from 0.01 to 20%, especially preferably of 0.05 to 10%, and most preferably from 0.1 to 5%. See [0008]. The polymer (B) can be a homopolymer or copolymer with monomer units containing acid groups on a natural or synthetic basis. Suitable monomers containing acid groups include, for example, acrylic acid, methacrylic acid, crotonic acid, maleic acid and/or maleic acid anhydride, maleic acid monoester, especially the mono-C1- to C7-alkyl ester of the maleic acid and aldehydocarboxylic acids or ketocarboxylic acids. Suitable polymer compounds with acid groups include cross-linked or uncross-linked vinyl acetate/crotonic acid copolymers; vinyl acetate/crotonic acid/vinyl alkanoate copolymers; VA/crotonates/vinyl neodecanoate copolymer; copolymers of one or more C1- to C5-alkylacrylates, especially C2- C4-alkylacrylates and acrylic acid or methacrylic acid; etc. See [0017]; [0020]; and examples.

Birkel discloses the composition is packaged in an aqueous, alcoholic or an aqueous-alcoholic medium preferably with at least 10 percent by weight water. Lower alcohols with 1 to 4 carbon atoms, such as ethanol and isopropanol, can be contained. See [0026] and examples. Examples utilize 10% water and above. Thus, instant claims 16-18 which claim **10-54.54%**; **10-45%**; **10-30%** are anticipated.

Organic solvents or a mixture of such solvents can be contained in the composition. Ethylene glycol (polyol), glycerol (polyol), and propylene glycol (polyol) in amount of up to 30 percent by weight are especially preferred water-soluble solvents. See [0027]. It is the examiner's position that Birkel anticipates the instant invention since the use of the polyol (ethylene glycol, glycerol, and propylene glycol) can be immediately envisaged by an artisan; the instant polyols are the only organic solvent disclosed. Note that up to 30% encompasses the instant range of at least 15% wherein 15-30% is anticipated by the prior art. Therefore, when a

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claimed range that touches, overlaps, or falls within a claimed range, it is anticipated. See MPEP 2144.05 I-II. This also applies to the dependent instant claims of 6-8. Further, note that ethylene glycol, glycerol, and propylene glycol reads on instant claims 12-14.

The composition is employed in various application forms including a lotion, as a non-aerosol spray solution, which is sprayed by means of a mechanical apparatus for spraying, as an aerosol spray which is sprayed by means of a propellant, as an aerosol-foam or as a non-aerosol foam, as a hair cream, and as a hair wax. See [0029]. Specifically, Birkel discloses if the hair treatment composition is in the form of an aerosol spray, it contains 15 to 85%, preferably 25 to 75% by weight of a propellant and is filled into a pressurized container. Example of propellants disclosed include lower alkanes, including n-butane, i-butane and propanes, dimethyl ether (DME) or fluorinated hydrocarbons be used as the propellant. See [0030] and examples. Example 4 discloses a composition packaged in an aerosol can, in a ratio 45:55 (composition:DME).

Birkel discloses cosmetic additive for the composition include wetting agents or emulsifiers from the classes of nonionic, anionic, cationic or amphoteric surface-active substances, such as fatty alcohol sulfates, alkylbenzene sulfonates, alkyltrimethyl ammonium salts, alkyl betaines, in an amount of from 0.1 to 15%; moisturizing agents; perfumes, in an amount of from 0.1 to 0.5%; turbidity-inducing agents, such as ethylene glycol distearates, in an amount of about 0.2 to 5.0%; buffer substances, such as sodium citrate or sodium phosphate, in an amount of 0.1 to 1.0%; care materials, such as plant and vegetable extracts, protein and silk hydrolyzates, lanolin derivative compounds, in an amount of from 0.1 to 5%; silicone derivative

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compounds, including volatile or non-volatile silicone oils or high molecular weight siloxane polymers, in an amount of from 0.05 to 20%. See [0028] and examples.

Birkel discloses the composition discloses the method for improving film-forming and hair-fixing properties wherein the composition is applied to the hair to fix the style. See [0006] and examples on page 4.

### ***Response to Arguments***

Applicant argues that Birkel does not direct one of ordinary skill in the art to chose a polyol but merely discloses ethylene glycol, glycerol, and propylene glycol as one possible group of organic solvents that can be included in the composition of Birkel. Applicant argues that a skilled artisan would have to choose to add a co-solvent and then select among branched or unbranched hydrocarbons, which is not grounds for anticipation. Applicant argues that Birkel provides no guidance in selecting an optional co-solvent or solvent and none of the examples show the use of the solvent or co-solvent.

Applicant's arguments filed 5/22/06 have been fully considered but they are not persuasive. The examiner points out that every embodiment need not be exemplified in order to anticipate a claim; this is not the criteria for anticipation. The criteria for anticipation is that if one can immediately envisage the claimed limitation, then it is anticipated. In instant case, the examiner points out that Birkel clearly discloses in paragraph [0027]:

Organic solvents or a mixture of such solvent with a boiling point under 400.degree.C. can be contained in the composition according to the invention in an amount of from 0.1 to 15 percent by weight, especially preferably of from 1 to 10 percent by weight, as additional co-solvents. Branched or unbranched hydrocarbons, such as pentane, hexane, isopentane and cyclic hydrocarbons, such as cyclopentane and cyclohexane, are especially suitable as co-solvents. Ethylene glycol, glycerol, and propylene glycol in amount of up to 30 percent by weight are especially preferred water-soluble solvents

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It is the examiner's position that Birkel anticipates the instant invention since the use of the polyol (ethylene glycol, glycerol, and propylene glycol) can be immediately envisaged since Birkel teaches ethylene glycol, glycerol, and propylene glycol are "especially preferred" water-soluble solvents and provides the concentration utilized. It should be noted that up to 30% encompasses the instant range of at least 15% wherein 30% anticipates the instant amount. Moreover, ethylene glycol, glycerol, and propylene glycol are all polyols with a molecular weight of less than 500. Thus, it is the examiner's position that one does not have to "pick and chose" the instant polyol from Birkel's polyols disclosed since all three polyols have the instant molecular weight. Bolich discloses the exact compounds to use (ethylene glycol, glycerol, and propylene glycol), the concentration in which it is used, and the function it serves in the composition, i.e. as an organic solvent. Thus, this embodiment is taught in sufficient specificity to immediately envisage it. The examiner points out that these polyols are not disclosed in a laundry list of additives to utilize.

With regard to applicant's argument that a skilled artisan would have to choose between ethylene glycol, glycerol, and propylene glycol and the hydrocarbons, the examiner points out, that [0027] discloses that as the co-solvent, branched or unbranched hydrocarbons are utilized in an amount of 1-10%. As solvents, ethylene glycol, glycerol, and propylene glycol, are especially preferred. The examiner points out that the hydrocarbons are taught as co-solvents and the instant polyols are taught as the solvent. Hence, one need not select between the polyols and hydrocarbons since both are disclosed for different functions, i.e. the instant polyols are solvents and hydrocarbons are co-solvents. It is the examiner's position that if the hydrocarbons and polyols were taught to be equivalent, then Birkel would not have made a clear distinction.

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Moreover, the hydrocarbons taught by Birkel are isopentane, hexane, pentane, cyclopentane, and cyclohexane. These hydrocarbons disclosed by Birkel also function as propellants. Thus, it is clear that there is a distinction between the polyols and the hydrocarbons taught. Lastly, the examiner again points out that the use of the organic solvents is not an obscure teachings. Birkel clearly discloses the use of the solvents when discussing the composition medium in the preceding paragraph. Thus, a skilled artisan can immediately envisage the use of an organic solvent, i.e. the instant polyols, in an amount of up to 30% when preparing the aqueous medium.

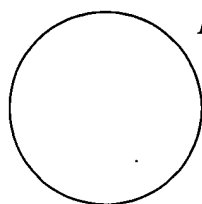
Applicant argues that Birkel discloses the hair composition may be in various form including lotions, non-aerosol sprays, aerosol sprays, aerosol foams, wax, cream, gel, and liquid gel. Applicant states that Birkel teaches if the treatment is in the form of an aerosol spray, then it contains 15-85% of a propellant. Applicant argues that Birkel provides no guidance for one to choose an aerosol spray. Therefore, applicant argues that each and every element as arranged by the instant invention, is not taught by Birkel.

Birkel discloses in paragraph [0030]:

If the hair treatment composition according to the invention is provided in the form of an aerosol spray, it contains 15 to 85, preferably 25 to 75, % by weight of a propellant and is filled into a pressurized container. For example, lower alkanes, such as n-butane, i-butane and propanes, or also their mixtures as well as dimethyl ether or fluorinated hydrocarbons, such as F152a (1,1-dichloroethane) or F134 (tetrafluoroethane) can be used as the propellant. Furthermore pressurized gases, such as N.sub.2, N.sub.2O and CO.sub.2 and their mixtures can also be used as the propellant.

Again, the examiner points out that exemplification of each embodiment is not the criteria of anticipation. If the prior art discloses the embodiment is sufficient specificity for one to immediately envisage it, then it is anticipated. However, the examiner points to example 2 in which Birkel discloses a hair spray comprising a propellant and filled in a aerosol can.

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**Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**The provisional rejection of claims 1-8, 15-23, and 25 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-29 of copending Application No. 10/796016 is maintained.**

The instant application is directed to an aerosol composition packaged in an aerosol device, comprising: a) at least one anionic fixing polymer present in an amount ranging from 0.5% to 10% by weight, based on the total weight of the aerosol composition, b) at least one polyol with a molecular weight less than 500, present in an amount greater than 15% by weight, based on the total weight of the aerosol composition, c) an aqueous-alcoholic or aqueous medium comprising at least 10% by weight of water, based on the total weight of the aerosol

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composition, and d) at least one propellant gas in an amount greater than or equal to 30% by weight, based on the total weight of the aerosol composition.

'016 is directed to an aerosol device comprising a) a cosmetic composition comprising a cosmetically acceptable medium comprising water and at least one organic solvent, at least one polyurethane, and (B) at least one propellant comprising dimethyl ether and at least one C3-C5 hydrocarbon. Dependent claim 13 is directed to anionic polyurethane. Dependent claim 14 is directed to the polyurethane in the amount of 0.5-20%. Dependent claim 16 is directed to the propellant in the amount of 20-70%. Dependent claim 21-22 is directed to the organic solvent is an alcohol selected from at least one lower alcohol, polyols, and polyol ethers. Dependent claim 24 is directed to the composition comprising 0.5-35% water. Dependent claims 26-27 are directed to the organic solvent in an amount of 15-65% and 30-60% respectively. Dependent 28 is directed to instantly claimed additives.

The instant application and copending application are directed to overlapping subject matter wherein both applications are directed to aerosol devices comprising a propellant, a cosmetic medium of a water and solvent (copending dependent claims recite polyols has the solvent), and an anionic polymer.

This is a provisional obviousness-type double patenting rejection.

### ***Response to Arguments***

Applicant requests that the rejections are held in abeyance until allowable subject matter is indicated.

The filing of a Terminal Disclaimer overcomes a double patenting rejection and thus the rejection is maintained.



**The provisional rejection of claims 9-14 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-29 of copending Application No. 10/796016 in view of US 5639448 is maintained.**

The instant application is directed to an aerosol composition packaged in an aerosol device, comprising: a) at least one anionic fixing polymer present in an amount ranging from 0.5% to 10% by weight, based on the total weight of the aerosol composition, b) at least one polyol with a molecular weight less than 500, present in an amount greater than 15% by weight, based on the total weight of the aerosol composition, c) an aqueous-alcoholic or aqueous medium comprising at least 10% by weight of water, based on the total weight of the aerosol composition, and d) at least one propellant gas in an amount greater than or equal to 30% by weight, based on the total weight of the aerosol composition. Dependent claims glycol, glycerol, and propylene glycol as the polyol.

'016 is directed to an aerosol device comprising a) a cosmetic composition comprising a cosmetically acceptable medium comprising water and at least one organic solvent, at least one polyurethane, and (B) at least one propellant comprising dimethyl ether and at least one C3-C5 hydrocarbon. Dependent claim 13 is directed to anionic polyurethane. Dependent claim 14 is directed to the polyurethane in the amount of 0.5-20%. Dependent claim 16 is directed to the propellant in the amount of 20-70%. Dependent claim 21-22 is directed to the organic solvent is an alcohol selected from lower alcohols, polyols, and polyol ethers. Dependent claim 24 is directed to the composition comprising 0.5-35% water. Dependent claims 26-27 are directed to the organic solvent in an amount of 15-65% and 30-60% respectively. Dependent 28 is directed to instantly claimed additives.

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US '448 teaches a method of thermo-styling hair. US '448 teaches the cosmetic vehicle is predominately water with a mixture of organic solvents. Suitable solvents known in the art include alcohols, polyols such as glycerol; glycols including propylene glycol in an amount of 1-75%. See column 14, lines 5-10.

The difference between the instant application and copending application is '016 does not claim the instant polyols. However, copending application claims polyols as the organic solvent of choice. Thus, it would have been obvious to a skilled artisan in the art at the time the invention was made to utilize the instantly claimed polyols. One would have been motivated to do so since US '448 teaches the instant polyols (glycerol and PPG) are conventional solvents used in the hair art. Therefore, the instant application and copending application are obvious modifications of each other and are directed to similar subject matter.

This is a provisional obviousness-type double patenting rejection.

#### ***Response to Arguments***

Applicant requests that the rejections are held in abeyance until allowable subject matter is indicated.

The filing of a Terminal Disclaimer overcomes a double patenting rejection and thus the rejection is maintained.

**The provisional rejection of claims 1-25 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-25 of copending Application No. 11/124229 in view of US 5639448 is maintained.**

The instant application is directed to an aerosol composition packaged in an aerosol device, comprising: a) at least one anionic fixing polymer present in an amount ranging from

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0.5% to 10% by weight, based on the total weight of the aerosol composition, b) at least one polyol with a molecular weight less than 500, present in an amount greater than 15% by weight, based on the total weight of the aerosol composition, c) an aqueous-alcoholic or aqueous medium comprising at least 10% by weight of water, based on the total weight of the aerosol composition, and d) at least one propellant gas in an amount greater than or equal to 30% by weight, based on the total weight of the aerosol composition. Instant application is also directed to the method of styling hair.

'229 is directed to a composition packaged in an aerosol device comprising, in a cosmetically acceptable medium, at least one anionic fixing polymer, at least one silicone oxyalkylenated, and at least one propellant. Dependent claim 2 is directed to the overlapping anionic polymers claimed in instant claim 2. Dependent claim 5 is directed to the anionic polymer in the amount of 0.05-25%. Dependent claims 13-14 recite dimethyl ether as the propellant. Dependent claim 15 is directed to the propellant in the amount of 25-90% and claim 16 is directed to 35-80%. Dependent claim 17 is directed to the cosmetic vehicle comprising water and a solvent. Dependent claim 18 is directed to the solvent selected from lower alcohols C1-4, polyols, polyol ethers, acetones, and mixtures thereof. Dependent claim 18 is directed to water in an amount less than 20%.

Copending application does not claim the amount of the polyol solvent in the composition.

US '448 teaches a method of thermo-styling hair. US '448 teaches the cosmetic vehicle is predominately water with a mixture of organic solvents. Suitable solvents known in the art include alcohols, polyols such as glycerol; glycols including propylene glycol in an amount of 1-

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75%. See column 14, lines 5-10. US '448 teaches a the propellant is used in an amount of 3-30%.

See column 13, line 50.

The difference between the instant application and copending application is that the instant application requires at least 15% polyols in the independent claim. However, copending application recites polyols and polyol ethers as the organic solvent in the cosmetic medium. Secondly, the copending application does not claim the concentration of polyol solvent. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to look to US '448 and utilize polyols in the instant concentration. One would have been motivated to do so since US '448 teaches the instant polyols are *conventionally* utilized as solvents in the amount of 1-75% and preferably 5-50% with water. With regard to instant claim 24, copending application claims a process of treating hair with an aerosol device comprising an anionic polymer, a silicone, a cosmetic medium, and a propellant. The difference between instant claim and copending claim is that the process claim does not claim a polyol as the solvent or the concentration. However, it would have been obvious to a skilled artisan to utilize a polyol solvent as the cosmetic medium since US '448 teaches water in combination with polyol solvents in an amount of 1-75% and preferably 5-50% are *conventionally* utilized in hair composition as carriers and solvents. Further, US '448 teaches the amount of propellant conventionally utilized is 3-30% and anionic polymers are used in the amount of 0-0.5%. Thus, US '448 teaches the concentrations of conventional additives used in the hair industry. Therefore, the instant application and copending application are obvious modifications of each other. Further, it should be noted that the manipulation of concentrations of conventional solvents encompassed by the prior art are considered to be *prima facie* obvious unless there is evidence indicating the amount

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is critical. See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Therefore, the instant application and copending application are obvious modifications of each other.

This is a provisional obviousness-type double patenting rejection.

***Response to Arguments***

Applicant requests that the rejections are held in abeyance until allowable subject matter is indicated.

The filing of a Terminal Disclaimer overcomes a double patenting rejection and thus the rejection is maintained.

**The provisional rejection of claims 1-25 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 23-50 of copending Application No. 10/279036 in view of US 5639448 is maintained.**

The instant application is directed to an aerosol composition packaged in an aerosol device, comprising: a) at least one anionic fixing polymer present in an amount ranging from 0.5% to 10% by weight, based on the total weight of the aerosol composition, b) at least one polyol with a molecular weight less than 500, present in an amount greater than 15% by weight, based on the total weight of the aerosol composition, c) an aqueous-alcoholic or aqueous medium comprising at least 10% by weight of water, based on the total weight of the aerosol composition, and d) at least one propellant gas in an amount greater than or equal to 30% by weight, based on the total weight of the aerosol composition. Instant application is also directed to the method of styling hair.

Independent claim 23 of '036 is directed to a composition packaged in an aerosol device comprising, in a cosmetically acceptable medium, at least one nonassociative fixing

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polyurethane and at least on anionic or nonionic associative polyurethane, and a propellant.

Dependent claim 35 is directed to the anionic or nonionic polymer in the amount of 0.5-10%.

Dependent claim 40 is directed to dimethyl ether as the propellant and claim 41 is directed to the

propellant in the amount of 2-90%. Dependent claim 43 is directed to the medium comprising

water and a solvent. Dependent claim 44 is directed to a solvent selected from at least lower

alcohols (C1-C4), alkylene polyol, a polyol ether, and mixtures. Dependent claim 46 is directed

to the instantly claimed additives and dependent claims are directed to a cosmetic hair treatment.

Copending application does not claim the amount of the polyol solvent in the composition.

US '448 teaches a method of thermo-styling hair. US '448 teaches the cosmetic vehicle is predominately water with a mixture of organic solvents. Suitable solvents known in the art include alcohols, polyols such as glycerol; glycols including propylene glycol in an amount of 1-75%. See column 14, lines 5-10. US '448 teaches a the propellant is used in an amount of 3-30%. See column 13, line 50. US '448 teaches water more than 10%.

The difference between the instant application and copending application is that the instant application requires at least 15% polyols. However, copending application recites polyols and polyol ethers as the organic solvent in a Markush group. Secondly, the copending application does not claim the concentration of polyol solvent. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to look to US '448 and utilize polyols in the instant concentration. One would have been motivated to do so since US '448 teaches the instant polyols are *conventionally* utilized as solvents and carriers in the amount of 1-75% and preferably 5-50% with water. Further, it should be noted that the manipulation of

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concentrations of conventional solvents encompassed by the prior art are considered to be prima facie obvious unless there is evidence indicating the amount is critical. See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Therefore, the instant application and copending application are obvious modifications of each other.

This is a provisional obviousness-type double patenting rejection.

### ***Response to Arguments***

Applicant argues that application '036 does not claim at least 15% polyol. Applicant argues that although US '448 teaches the use of polyols, they are not conventionally utilized. The polyols are merely taught as possible additives to solublize compounds in an amount of 1-75%. Thus, applicant argues there is not motivation to combine '448 and '036. Applicant argues the merits of *In re Aller* are not applicable since *Aller* is directed to a process and the instant claims are compositions.

Applicant's arguments filed 5/22/06 have been fully considered but they are not persuasive. US '448 teaches on column 6, lines 25-35 that the medium is water, water/ethanol, water/isopropanol or water/water-soluble-glycol carrier mixtures. As acknowledged by applicant, US '448 teaches the use of the instant polyols in an amount of 1-75% and preferably 5-50% to solublize compounds that are not sufficiently soluble. Thus, the motivation to add the instant polyols is to solublize other compounds in the hair composition. The examiner has provided a clear motivation to combine the references, which applicant has not addressed. With regard to the instantly claimed amount, US '448 teaches 1-75% and 5-50%. Thus, the instant "more than 15% is rendered obvious by US '448 range. With regard to *Aller*, the examiner points out that this case law is not only applicable to process claims as argued by applicant. Although the facts

specific to *Aller* pertained to a process, this does not preclude the application of *Aller* in other situations. *In re Aller* pertained to the criticality of the *concentrations* and temperatures claimed. Thus, the conclusions drawn from *Aller* clearly is applicable in the instant situation since US '448 teaches a range of 1-75% and applicant has not provided any unexpectedness of the instant range of "more than 15%". Therefore, regardless of the fact that *Aller* pertained to a process whereas the instant claims are directed to a composition, the conclusion drawn from *Aller* are still applicable in the instant case.

Therefore, the rejection is maintained.

**The provisional rejection of claims 1-25 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 11/220586 in view of US 5639448 is maintained.**

The instant application is directed to an aerosol composition packaged in an aerosol device, comprising: a) at least one anionic fixing polymer present in an amount ranging from 0.5% to 10% by weight, based on the total weight of the aerosol composition, b) at least one polyol with a molecular weight less than 500, present in an amount greater than 15% by weight, based on the total weight of the aerosol composition, c) an aqueous-alcoholic or aqueous medium comprising at least 10% by weight of water, based on the total weight of the aerosol composition, and d) at least one propellant gas in an amount greater than or equal to 30% by weight, based on the total weight of the aerosol composition.

'586 is directed to a composition packaged in an aerosol device comprising at least one non-polyurethane anionic or nonionic fixing polymer, at least one anionic acrylic polymer, and at least one propellant in an amount greater than 20%. Dependent claim 7 is directed to the anionic



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polymer in the amount of 0.01-30%. Dependent claim 10 is directed to overlapping anionic polymers as claimed in instant claim 2. Dependent claim 14 is directed to 20-80% water. Dependent claims 15 is directed to 20-70% of the propellant. Dependent claims 17-18 recite dimethyl ether as the propellant. Dependent claim 15 is directed to the propellant in the amount of 25-90% and claim 16 is directed to 35-80%. Dependent claim 17 is directed to the cosmetic vehicle comprising water and a solvent. Dependent claim 18 is directed to the solvent selected from lower alcohols, polyols, polyol ethers, acetones, and mixtures thereof. Dependent claim 18 is directed to water in an amount less than 20%. Claim 20 is directed to the method of styling hair by applying the composition.

Copending application does not claim the amount of the polyol solvent in the composition.

US '448 teaches a method of thermo-styling hair. US '448 teaches the cosmetic vehicle is predominately water with a mixture of organic solvents. Suitable solvents known in the art include alcohols such as ethanol and isopropanol, polyols such as glycerol; glycols including propylene glycol in an amount of 1-75% and 5-50%. See column 14, lines 5-10.

The difference between the instant application and copending application is that the instant application requires at least 15% polyols. However, it would have been obvious for one of ordinary skill in the art at the time the invention was made to look to US '448. US '448 teaches the instant polyols are conventionally utilized as solvents in the amount of 1-75% and 5-50% and are in combination with water as the predominate solvent. Further, it should be noted that the manipulation of concentrations of conventional solvents encompassed by the prior art are considered to be prima facie obvious unless there is evidence indicating the amount is critical.

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See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Therefore, the instant application and copending application are obvious modifications of each other.

This is a provisional obviousness-type double patenting rejection.

***Response to Arguments***

Applicant requests that the rejections are held in abeyance until allowable subject matter is indicated.

The filing of a Terminal Disclaimer overcomes a double patenting rejection and thus the rejection is maintained.

**The provisional rejection of claims 1-25 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 20-36 of copending Application No. 10/479170 in view of US 5639448 is maintained.**

The instant application is directed to an aerosol composition packaged in an aerosol device, comprising: a) at least one anionic fixing polymer present in an amount ranging from 0.5% to 10% by weight, based on the total weight of the aerosol composition, b) at least one polyol with a molecular weight less than 500, present in an amount greater than 15% by weight, based on the total weight of the aerosol composition, c) an aqueous-alcoholic or aqueous medium comprising at least 10% by weight of water, based on the total weight of the aerosol composition, and d) at least one propellant gas in an amount greater than or equal to 30% by weight, based on the total weight of the aerosol composition.

'170 is directed to a cosmetic composition packaged in an aerosol device comprising a propellant, a liquid phase comprising a cosmetic medium, solid particles, a fixing polymer and/or a thickening polymer and aluminum. Dependent claim 26 is directed to an anionic or nonionic

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polymer. Dependent claim 27 is directed to an anionic polymer wherein the monomers are sulfonic acids. Dependent claim 29 is directed to a thickening polymer that is a copolymer of acrylic acid and methacrylic acid (anionic polymer). Dependent claim 32 is directed to the polymer in the amount of 0.01-8%. Dependent claim 33 is directed to DME. And claim 35 is directed to the propellant in the amount of 2-90%. Dependent claim 36 is directed to the same additives as recited in instant claims. Dependent claims are directed to a method of styling the hair.

Copending application does not claim a polyol solvent in the composition.

US '448 teaches a method of thermo-styling hair. US '448 teaches the cosmetic vehicle is predominately water with a mixture of organic solvents. Suitable solvents known in the art include alcohols such as ethanol and isopropanol, polyols such as glycerol; glycols including propylene glycol in an amount of 1-75% and 5-50%. See column 14, lines 5-10. US '448 teaches the ethanol in the amount of 0-8% and water more than 10%.

The difference between the instant application and copending application is that the instant application requires at least 15% polyols and at least 10% water. However, it would have been obvious for one of ordinary skill in the art at the time the invention was made to look to US '448. US '448 teaches the instant polyols are conventionally utilized as solvents in the amount of 1-75% and 5-50% and are in combination with water as the predominate solvent to form the liquid carrier in hair compositions. Therefore, it would have been obvious to utilize a polyol in the instant amount with water to form the liquid phase of '170 since the prior art teaches these are conventional carriers. Further, it should be noted that the manipulation of concentrations of additives such as solvents encompassed by the prior art are considered to be prima facie obvious

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unless there is evidence indicating the amount is critical. See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Therefore, the instant application and copending application are obvious modifications of each other.

### ***Response to Arguments***

Applicant states that claims 1-19 have been cancelled. Applicant argues that application '170 does not claim at least 15% polyol. Applicant argues that although US '448 teaches the use of polyols, they are not conventionally utilized. The polyols are merely taught as possible additives to solublize compounds in an amount of 1-75%. Thus, applicant argues there is not motivation to combine '448 and '170. Applicant argues the merits of *In re Aller* are not applicable since *Aller* is directed to a process and the instant claims are compositions.

Applicant's arguments filed 5/22/06 have been fully considered but they are not persuasive. Firstly, the examiner notes that claims 1-19 were cancelled in a preliminary amendment and only claims 20-36 are pending. The examiner notes the typographical error wherein the instant claims were rejected over claims 1-36 of copending application. This has been noted and corrected. However, this does not change the rejection since claims 20-36 had been previously rejected and remain rejected.

US '448 teaches on column 6, lines 25-35 that the medium is water, water/ethanol, water/isopropanol or water/water-soluble-glycol carrier mixtures. As acknowledged by applicant, US '448 teaches the use of the instant polyols in an amount of 1-75% and preferably 5-50% to solublize compounds that are not sufficiently soluble. Thus, the motivation to add the instant polyols is to solublize other compounds in the hair composition. The examiner has provided a clear motivation to combine the references, which applicant has not addressed. With regard to

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the instantly claimed amount, US '448 teaches 1-75% and 5-50%. Thus, the instant "more than 15% is rendered obvious by US '448 range. With regard to *Aller*, the examiner points out that this case law is not only applicable to process claims as argued by applicant. Although the facts specific to *Aller* pertained to a process, this does not preclude the application of *Aller* in other situations. *In re Aller* pertained to the criticality of the *concentrations* and temperatures claimed. Thus, the conclusions drawn from *Aller* clearly is applicable in the instant situation since US '448 teaches a range of 1-75% and applicant has not provided any unexpectedness of the instant range of "more than 15%". Therefore, regardless of the fact that *Aller* pertained to a process whereas the instant claims are directed to a composition, the conclusion drawn from *Aller* are still applicable in the instant case.

Therefore, the rejection is maintained.

### ***Conclusion***

All the claims are rejected at this time.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

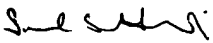
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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharmila S. Gollamudi whose telephone number is 571-272-0614. The examiner can normally be reached on M-F (8:00-5:30), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Sharmila S. Gollamudi  
Examiner  
Art Unit 1616